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PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

PFAUTER MAAG CUTTING TOOLS LOVES PARK, ILLINOIS ILD 070 168 968

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460

Work Assignment No.	:	R05032
EPA Region	:	5
Site No.	:	ILD 070 168 968
Date Prepared	:	September 3, 1993
Contract No.	:	68-W9-0006
PRC No.	:	309-R05032IL82
Prepared by	:	PRC Environmental Management, Inc. (Michael G. Duffin)
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION O

HRE-8J

March 12, 1993

Mr. Chris Berndt
Plant Engineer
Pfauter Maag Cutting Tools
1300 Rock Street
Rockford, Illinois 61102

Re: Visual Site Inspection
Pfauter Maag Cutting Tools
1300 Rock Street
Rockford, Illinois 61102
ILD 070 168 968

Dear Mr. Berndt:

The United States Environmental Protection Agency (U.S. EPA) Region V will conduct a Preliminary Assessment including a Visual Site Inspection (PA/VSI) at the referenced facility. This inspection is conducted pursuant to the Resource Conservation and Recovery Act, as amended (RCRA) Section 3007 and the Comprehensive Environmental Response, Compensation, and Liability Act, as amended (CERCLA) Section 104(e). The referenced facility has generated, treated, stored, or disposed of hazardous waste subject to RCRA. The PA/VSI requires identification and systematic review of all solid waste streams at the facility. The objective of the PA/VSI is to determine whether or not releases of hazardous wastes or hazardous constituents hav occurred or are occurring at the facility which may require further investigation. This analysis will also provide information to establish priorities for addressing any confirmed releases.

The visual site inspection of your facility is to verify the location of all solid waste management units (SWMUs) and areas of concern (AOCs) to make a cursory determination of their condition by visual observation. The definitions of SWMUs and AOCs are included in Attachment I. The VSI supplements and updates data gathered during a preliminary file review. During this site inspection, no samples will be taken. A sampling visit to ascertain if releases of hazardous waste or constituents have occurred may be required at a later date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previou disposal practices. The site inspection is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of the

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facility are necessary to document the condition of the units at the facility and the waste management practices used.

The VSI has been scheduled for 9:00 a.m. on March 26, 1993. The inspection team will consist of Michael Duffin and Scott Storlid of PRC Environmental Management, Inc., a contractor for the U.S. EPA. Representatives of the Illinois Environmental Protection Agency (IEPA) may also be present. Your cooperation in admitting and assisting them while on site is appreciated.

The U.S. EPA recommends that personnel who are familiar with present and past manufacturing and waste management activities be available during the VSI. Access to any relevant maps, diagrams, hydrogeologic reports, environmental assessment reports, sampling data sheets, environmental permits (air, NPDES), manifests and/or correspondence is also necessary, as such information is needed to complete the PA/VSI.

If you have any questions, please contact me at (312) 886-4448 or Francene Harris at (312) 886-2884. A copy of the Preliminary Assessment/Visual Site Inspection Report, excluding the conclusions and Executive Summary portion will be sent when the report is available.

Sincerely yours,

Francene M. Harris for.

Kevin M. Pierard, Chief
OH/MN Technical Enforcement Section

Enclosure

cc: Bob Wengrow, IEPA

ATTACHMENT I

The definitions of solid waste management unit (SWMU) and area of concern (AOC) are as follows.

A SWMU is defined as any discernable unit where solid wastes have been placed at any time from which hazardous constituents might migrate, regardless of whether the unit was intended for the management of a solid or hazardous waste.

The SWMU definition includes the following:

- RCRA regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that U.S. Environmental Protection Agency has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents, such as wood preservative treatment dripping areas, loading or unloading areas, or solvent washing areas

An AOC is defined as any area where a release to the environment of hazardous wastes or constituents has occurred or is suspected to have occurred on a nonroutine or nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

PRC requests that, if available, the following facility information be provided during the VSI:

1. Two copies of a detailed map of the facility
2. Facility history, including dates of operation, ownership changes, and production processes
3. Current facility operations
4. Processes that generate waste that is treated, stored, or disposed of at the facility
5. Records of disposal of wastes generated at the facility (manifests, annual reports, etc...)
6. Security at the facility
7. Information regarding geology and the uses of ground water and surface water in the area
8. Permits (air, NPDES, etc...) the facility currently holds or has held in the past and documentation of any permit violations that may have occurred
9. Records of any spills that may have occurred at the facility
10. Descriptive operational information (location, dimensions, capacity, materials of construction, etc...), dates of start-up and closure, wastes managed, release controls, and release history for each SWMU

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FIGURES

TABLES

EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Pfauter Maag Cutting Tools (Pfauter Maag) facility in Loves Park, Illinois. This summary highlights the results of the PA/VSI and the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified.

The Pfauter Maag facility manufactures specialty cutting tools for gear and saw manufactures. The facility generates and manages the following waste streams: waste Stoddard solvent (D001); waste isopropanol (D001); waste freon (F001); waste barium chloride (D005); waste oil (nonhazardous); composite sludge (nonhazardous); steel shot fines (nonhazardous); glass bead fines (nonhazardous); waste absorbent pigs (nonhazardous); and scrap metal (nonhazardous). In 1986, waste paint thinner (toluene) (F005) was accidentally added to the waste oil underground storage tank (UST). Analysis of the mixture indicated the waste oil was nonhazardous. However, because F005 waste was added to the waste oil, the entire contents of the tank was considered a RCRA regulated waste, and the facility was forced to add the UST to the Part A permit in order to undergo proper RCRA closure. The facility listed the waste oil as D001 waste, not F005 waste, on the revised Part A permit. In the past the facility also generated and managed waste barium cyanide (D003, F011).

Pfauter Maag has operated at the facility since 1987 and employs 190 people. The 250,000 square foot facility was constructed by the Barber Coleman Company (Barber Coleman) in 1969. Barber Coleman owned and operated the entire facility from 1969 to 1980. In 1980, Barber Coleman sold the machine tool division, which was located in the eastern half of the building, to Born and Cole Company (Born and Cole). Born and Cole removed the equipment from the eastern half of the facility and never occupied the facility. According to Barber Coleman representatives, the eastern half of the facility was used mainly to store raw materials from 1980 to 1986. Barber Coleman representatives also stated that nonhazardous waste oils may have been generated on the eastern half of the facility and managed outdoors in the Former UST (SWMU 9) and that no hazardous waste generation or management ever took place in the eastern half of the facility. In 1986, Barber Coleman leased the eastern half of the building to Rockford Automation, a manufacturer of automated assembly

equipment and a generator with its own EPA identification number. In September 1987, Barber Coleman sold the western half of the facility to a limited partnership of Pfauter Maag Cutting Tools. In June 1988, Pfauter Maag bought the entire property and facility from Barber Coleman and continued to lease the eastern half of the building to Rockford Automation. In December 1990, Rockford Automation went bankrupt and ceased to exist. In March 1991, Pfauter Maag leased the eastern half of the building to American Pfauter. American Pfauter is a generator with an EPA identification number (ILD 984 817 858) separate from Pfauter Maag Cutting Tools. PRC inspected the half of the facility occupied by Pfauter Maag and the Nonhazardous Waste Container Storage Area (SWMU 4), located in American Pfauter's half of the building, which is used to store nonhazardous waste oils generated by both facilities. PRC inspected all RCRA regulated units listed on the November 18, 1980 Part A application.

On June 5, 1987, while Barber Coleman occupied the facility, Illinois Environmental Protection Agency approved the RCRA closure of the Former Hazardous Waste Storage Area (SWMU 3), the current Hazardous Waste Storage Area (SWMU 1), and the Former UST (SWMU 9). On August 3, 1987, EPA withdrew the facility's Part A permit, changing its status to generator only. The facility is currently regulated as a generator with less than 90-day storage of hazardous waste.

The PA/VSI identified the following nine SWMUs and no AOCs were identified at the facility:

Solid Waste Management Units

1. Hazardous Waste Storage Area
2. Hazardous Waste Satellite Accumulation Areas (SAA)
3. Former Hazardous Waste Storage Area
4. Nonhazardous Waste Container Storage Area
5. Nonhazardous Waste Dumpsters
6. Baghouse Dust Collector
7. Glass Bead SAA
8. Scrap Metal Hopper
9. Former UST

All SWMUs at the facility have a low potential for release to environmental media. SWMUs 1, 3, and 9 have undergone IEPA-approved RCRA closure. SWMUs 3 and 9 are no longer in use and SWMU 1 currently stores hazardous waste for less than 90 days indoors on an epoxy-sealed concrete

pad surrounded by a 10-inch epoxy-sealed concrete dike. SWMU 2 is located indoors on an epoxy-sealed concrete floor. SWMU 4 stores nonhazardous waste oils indoors on an epoxy-sealed concrete pad surrounded by a 10-inch epoxy-sealed concrete dike. SWMU 5 stores nonhazardous waste and is located outdoors on a concrete pad beneath a building overhang. SWMUs 6 and 8 store nonhazardous waste and are located outdoors on concrete pads. SWMU 7 stores nonhazardous waste and is located indoors on a concrete, overlain by an epoxy-sealed wooden block floor.

The nearest surface water body is an inactive gravel pit located 0.2 mile east of the facility. Surface water runoff from the facility does not enter the gravel pit. The nearest sensitive environment, a wetland, is located 0.5 mile south of the facility. Surface water drainage at the facility is towards the south-southwest through an on-site drainage ditch which discharges to an unnamed stream tributary to the Rock River. Pfauter Maag has a NPDES permit to discharge noncontact cooling water to the drainage ditch.

The nearest residential area is located approximately 0.1 mile west of the facility. The nearest municipal well is located 0.9 mile southeast and downgradient of the facility. All water used at the Pfauter Maag facility is supplied by the City of Loves Park groundwater wells.

PRC recommends that no further action be taken at the facility at this time.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. R05032 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has usually exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading or unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release of hazardous waste or constituents to the environment has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where a strong possibility exists that such a release might occur in the future.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility
- Obtain information on the operational history of the facility
- Obtain information on releases from any units at the facility
- Identify data gaps and other informational needs to be filled during the VSI

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA
- Identify releases not discovered during the PA
- Provide a specific description of the environmental setting
- Provide information on release pathways and the potential for releases to each medium
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases

The VSI includes interviewing appropriate facility staff; inspecting the entire facility to identify all SWMUs and AOCs; photographing all visible SWMUs; identifying evidence of releases; making a preliminary selection of potential sampling parameters and locations, if needed; and obtaining additional information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Pfauter Maag Cutting Tools (Pfauter Maag) facility (EPA Identification No. ILD 070 168 968) in Loves Park, Illinois. The PA was completed on March 25, 1993. PRC gathered and reviewed information from the Illinois Environmental Protection Agency (IEPA), Illinois State Water Survey (ISWS), Illinois State Geological Survey (ISGS), U.S. Department of Agriculture (USDA), U.S. Department of Commerce (USDC), U.S. Geological Survey (USGS), U.S. Fish and Wildlife Service (USFWS), Federal Emergency Management Agency

(FEMA), and from EPA Region 5 RCRA files. The VSI was conducted on March 26, 1993. It included interviews with facility representatives and a walk-through inspection of the facility. PRC identified nine SWMUs at the facility; no AOCs were identified.

The VSI is summarized and ten inspection photographs are included in Appendix A. Field notes from the VSI are included in Appendix B.

2.0 FACILITY DESCRIPTION

This section describes the facility's location; past and present operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors.

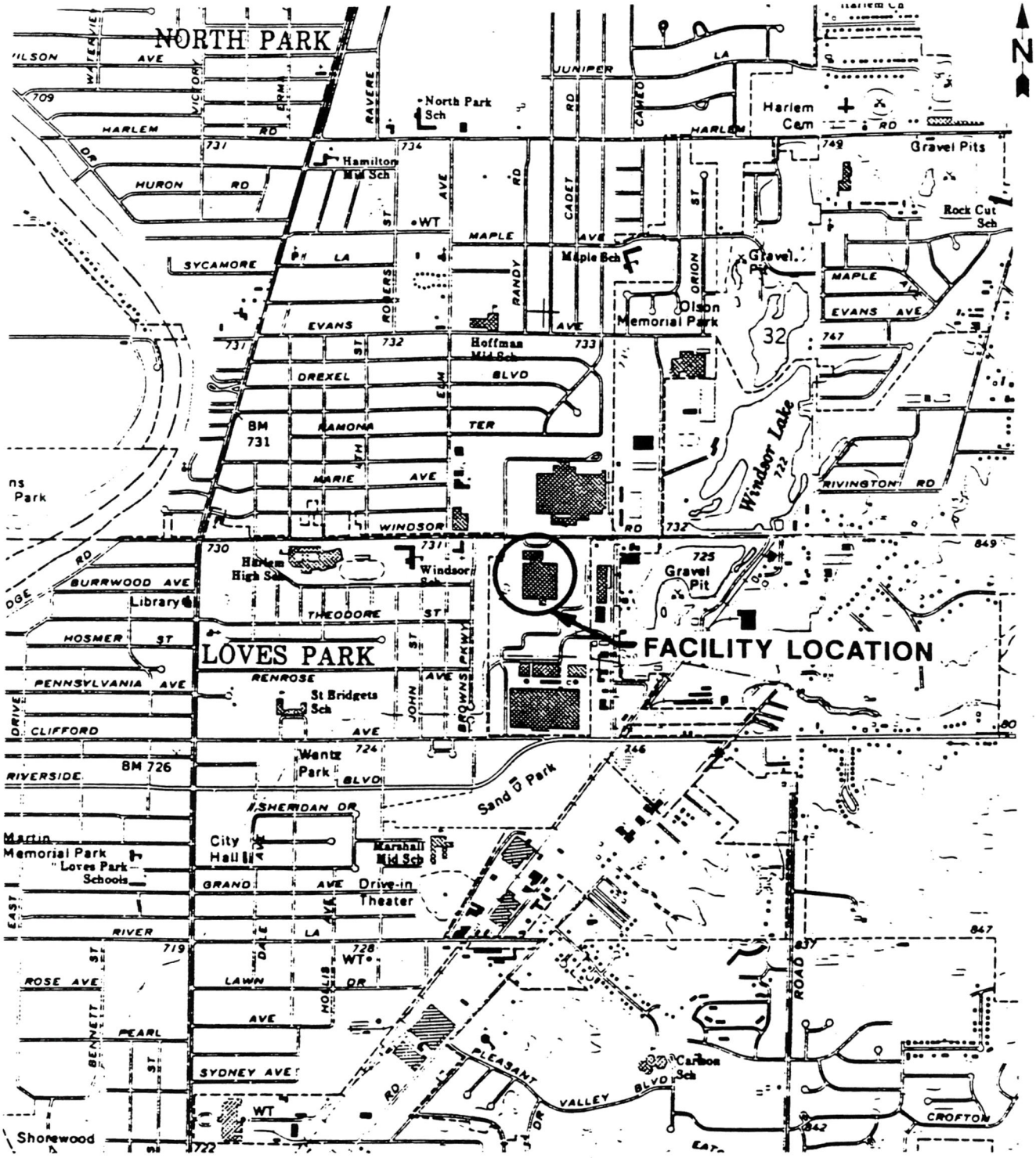
2.1 FACILITY LOCATION

The Pfauter Maag facility is located at 1351 Windsor Road in Loves Park, Winnebago County, Illinois (latitude 42°19'30" N and longitude 89°2'30" W). Figure 1 shows the location of the facility in relation to the surrounding topographic features. The facility is bordered on the north by Rockford Powertrain Company; on the east by several light industrial facilities; on the south by Barber Coleman Company; and on the west by single-family residences.

2.2 FACILITY OPERATIONS

The facility currently manufactures specialty cutting tools for gear and saw manufacturers. The cutting tools are formed from various grades of steel and alloy and precision machined by grinding and cutting. Heat treatment for tool hardening, coating with titanium nitrate, and etching and polishing may also be used in the manufacturing process. The facility was formerly owned and operated by the Barber Coleman Company, a manufacturer of machine and cutting tools. Raw materials currently used at the facility include various grades of steel and alloys, cutting oils and coolants, and heat treatment chemicals. Cutting oils and heat treatment chemicals are stored in various sized containers in a product storage area.

Pfauter Maag has operated at the facility since 1987 and employs 190 people. The 250,000-square-foot facility was constructed by the Barber Coleman Company in 1969. Barber Coleman owned and operated the entire facility from 1969 to 1980. In 1980, Barber Coleman sold the machine tool division, which was located in the eastern half of the building, to Born and Cole Company (Born and Cole). Born and Cole removed the equipment from the eastern half of the facility and never occupied the facility. According to Barber Coleman representatives, the eastern half of the facility was used



SOURCE: MODIFIED FROM USGS, ROCKFORD NORTH QUADRANGLE, 1976

PFAUTER MAAG CUTTING TOOLS
LOVES PARK, ILLINOIS

FIGURE 1
FACILITY LOCATION

PRC ENVIRONMENTAL MANAGEMENT, INC.

mainly to store raw materials from 1980 to 1986. Barber Coleman representatives also stated that nonhazardous waste oils may have been generated in the eastern half of the facility and managed outdoors in the Former Underground Storage Tank (UST) and that no hazardous waste generation or management ever took place in the eastern half of the facility (PRC 1993a). In 1986, Barber Coleman leased the eastern half of the building to Rockford Automation, a manufacturer of automated assembly equipment and a generator with its own EPA identification number. In September 1987, Barber Coleman sold the western half of the facility to a limited partnership of Pfauter Maag Cutting Tools. In June 1988, Pfauter Maag bought the entire property and facility from Barber Coleman and continued to lease the eastern half of the building to Rockford Automation. In December 1990, Rockford Automation went bankrupt and ceased to exist. In March 1991, Pfauter Maag leased the eastern half of the building to American Pfauter. American Pfauter is a generator with an EPA identification number (ILD 984 817 858) separate from Pfauter Maag Cutting Tools. PRC inspected the half of the facility occupied by Pfauter Maag and the Nonhazardous Waste Container Storage Area (SWMU 4), located in American Pfauter's half of the building, which is used to store nonhazardous waste oils generated by both facilities. PRC inspected all RCRA-regulated units listed on the November 18, 1980 Part A application. Facility representatives did not know if Barber Coleman managed Satellite Accumulation Areas (SAAs) in the area currently occupied by American Pfauter.

2.3 WASTE GENERATION AND MANAGEMENT

This section describes waste generation and management at the Pfauter Maag facility. The facility's SWMUs are identified in Table 1. The facility layout, including SWMUs and AOCs, is shown in Figure 2. The facility's waste streams are summarized in Table 2.

The hazardous waste streams currently generated at the facility are waste Stoddard solvent (D001), waste isopropanol (D001), waste freon (F001), and waste barium chloride (D005). In the past, waste barium cyanide (D003, F011) was generated. Nonhazardous waste streams currently generated at the facility are waste oils, composite sludge, steel shot fines which ultimately become part of the composite sludge, waste absorbent pigs, and scrap metal.

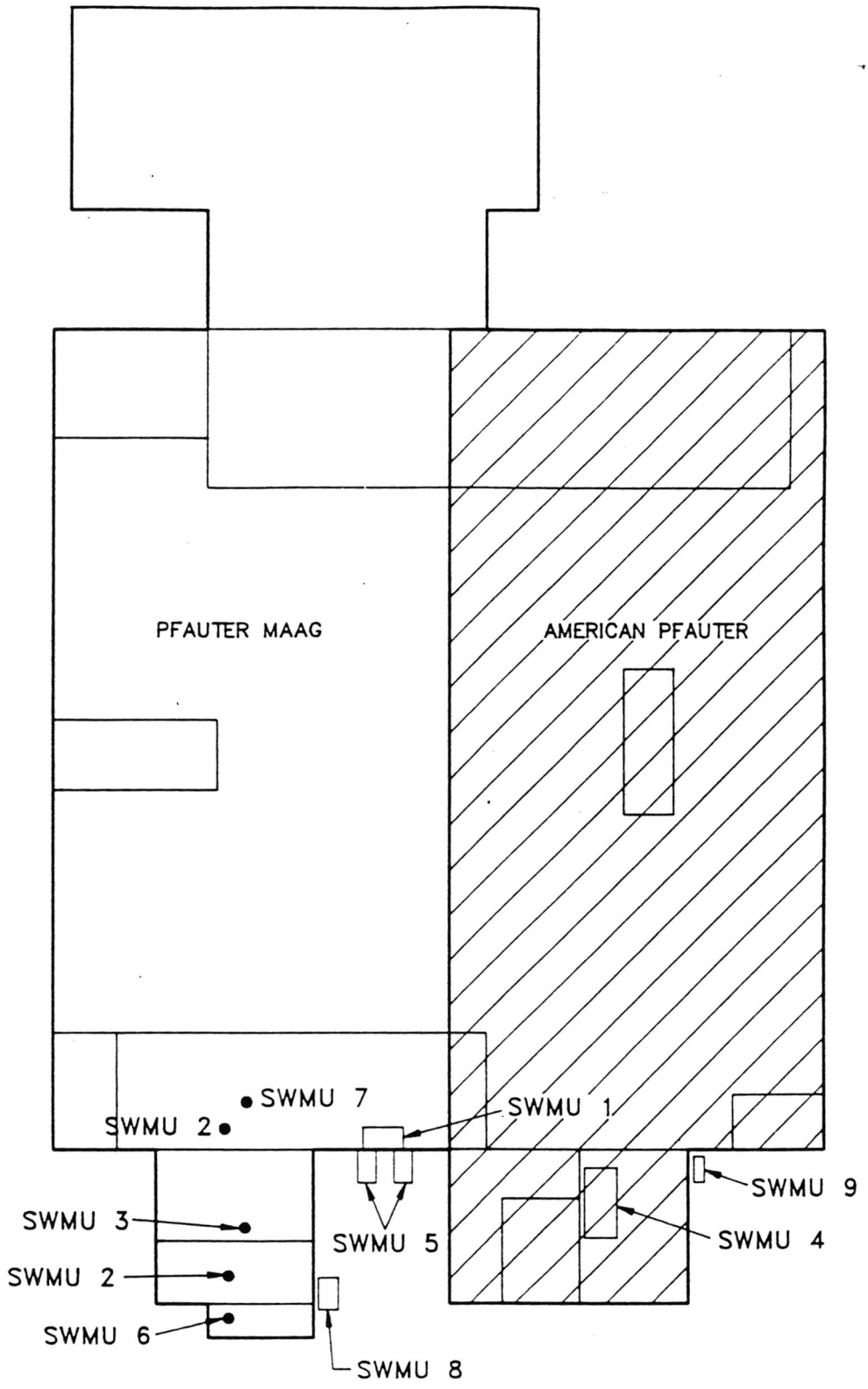
TABLE 1

SOLID WASTE MANAGEMENT UNITS

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit[a]	Status
1	Hazardous Waste Storage Area	Yes	RCRA closed in 1987; currently used for less than 90-day storage of hazardous waste
2	Hazardous Waste Satellite Accumulation Areas (SAA)	No	Active
3	Former Hazardous Waste Storage Area	Yes	RCRA closed in 1987; currently inactive
4	Nonhazardous Waste Container Storage Area	No	Active
5	Nonhazardous Waste Dumpsters	No	Active
6	Baghouse Dust Collector	No	Active
7	Glass Bead Satellite Accumulation Area (SAA)	No	Active
8	Scrap Metal Hopper	No	Active
9	Former Underground Storage Tank (UST)	Yes	RCRA closed and removed in 1987

Note:

[a] A RCRA hazardous waste management unit is one that currently requires or formerly required submittal of a RCRA Part A or Part B permit application.



LEGEND

SWMU 1	HAZARDOUS WASTE STORAGE AREA
SWMU 2	HAZARDOUS WASTE SATELLITE ACCUMULAION AREAS
SWMU 3	FORMER HAZARDOUS WASTE STORAGE AREA
SWMU 4	NONHAZARDOUS WASTE CONTAINER STORAGE AREA
SWMU 5	NONHAZARDOUS WASTE DUMPSTERS
SWMU 6	BAGHOUSE DUST COLLECTOR
SWMU 7	GLASS BEAD SATELLITE ACCUMULATION AREA
SWMU 8	SCRAP METAL HOPPER
SWMU 9	FORMER UNDERGROUND STORAGE TANK
▨	SEPARATE EPA ID NO.

NOT TO SCALE

SOURCE: MODIFIED FROM PFAUTER SKETCH RECEIVED BY PRC ON MARCH 26, 1993

PFAUTER.DWG - 06/15/93 - CER - 309-R050321L82

PFAUTER MAAG CUTTING TOOLS
LOVES PARK, ILLINOIS

FIGURE 2
FACILITY LAYOUT

PRC ENVIRONMENTAL MANAGEMENT, INC.

TABLE 2

SOLID WASTES

Waste/EPA Waste Code[a]	Source	Solid Waste Management Unit[b]
Stoddard solvent/D001	Parts washers	SWMU 1
Waste isopropanol/D001	Parts cleaning	SWMU 1 and 2
Waste freon/F001	Parts drying	SWMU 1 and 2
Waste barium chloride/D005	Heat treatment	SWMU 1 and 2
Waste barium cyanide[c]/D003, F011	Heat treatment	SWMU 1 and 3
Waste oil/NA	Machines	SWMU 4
Composite sludge/NA	Cutting/grinding/ cleaning/deionizing	SWMU 5
Steel shot fines/NA	Steel Shot Blaster	SWMU 5 and 6
Glass Bead Fines/NA	Parts Cleaning	SWMU 7 and 5
Waste absorbent pigs/NA	Housekeeping	SWMU 5
Scrap metal/NA	Maintenance	SWMU 8
Contaminated waste oils[d]/F005	Former UST	SWMU 9
PCB-containing electrical transformer oil	Electrical transformers	None

Notes:

[a] Not applicable (NA) designates nonhazardous waste.
[b] "None" indicates that the waste stream is not managed on site.
[c] No longer generated
[d] One-time generation

In 1986, the facility had a one-time generation of contaminated waste oil (F005). In 1989, the facility had a one-time generation of PCB-contaminated electrical transformer oils. Stoddard solvent is used to clean and degrease cutting tools and is generated and managed in ten parts washers. Eight of the parts washers are maintained by Safety-Kleen, Inc. and two of the parts washers are maintained by Pfauter Maag. When the washers are cleaned, waste Stoddard solvent (D001) is placed in 55-gallon steel drums and stored in the Hazardous Waste Storage Area (SWMU 1). Twelve to fourteen 55-gallon drums of waste Stoddard solvent are generated per quarter and are sent to Safety-Kleen, Inc. in Dolton or Elgin, Illinois, where the waste is recycled.

Titanium nitrate coating is baked on some cutting tools to improve longevity. Prior to coating the cutting tools, the tools are cleaned with isopropanol and dried with freon generating waste isopropanol (D001) and waste freon (F001). These wastes are collected in separate 55-gallon steel drums in a Hazardous Waste Satellite Accumulation Area (SAA) (SWMU 2). Full drums are transferred to SWMU 1. The one to two drums of waste isopropanol generated per quarter are shipped to Treatment One in Houston, Texas, where the waste is fuel blended. Less than one 55-gallon drum of waste freon is generated per year. Waste freon is recycled by Safety-Kleen, Inc. in Elgin, Illinois.

Cutting tools may be hardened by a heat treatment process using molten barium chloride. Waste barium chloride (D005) solids are collected one time each day and placed in a 55-gallon steel drum in a Hazardous Waste SAA (SWMU 2). Full drums of waste barium chloride are transferred to SWMU 1. Four to six drums are generated per quarter and are shipped to Cyanokem in Detroit, Michigan, where the waste is treated and rendered nonhazardous.

From 1987 to 1992, waste barium cyanide (D003, F011) was generated in a heat treatment process. Approximately one 55-gallon drum of waste barium cyanide was generated per year and was stored in the Former Hazardous Waste Container Storage Area (SWMU 3), before being sent to Cyanokem in Detroit, Michigan, where it was rendered nonhazardous.

Waste oils are generated by several machining processes and consist of water-soluble and petroleum-based cutting oils, machine oils, and coolants. Approximately 1,000 gallons of waste oils are generated per quarter. Waste oils are pumped from machine sumps into 55-gallon steel drums and stored in the Nonhazardous Waste Container Storage Area (SWMU 4). The waste oil is sent to

Interstate Pollution Control in Rockford, Illinois, where the aqueous phase is separated and recycled and the non-aqueous phase is sent to a separate facility for treatment and recycling.

Composite sludge is a combination of grinding swarf, steel shot fines, glass bead fines, grinding wheel dust, and deionizing resins. Composite sludge is stored in one of two 12-cubic-yard Nonhazardous Waste Dumpsters (SWMU 5) located outside, beneath a building overhang. Grinding swarf is generated by cutting machines and is collected on a magnetic separator before being scraped off and taken to SWMU 5. Steel shot fines are generated by a shot blaster used to descale the cutting tools after heat treating. The steel shot fines are collected in a Baghouse Dust Collector (SWMU 6) outside the building. The Baghouse Dust Collector (SWMU 6) contains the steel shot fines in a 55-gallon steel drum. When the drum is full, it is emptied into the composite sludge dumpster in SWMU 5. Glass bead fines are generated by a glass bead blaster used to clean the surface of the cutting tools prior to coating with titanium nitrate. Glass bead fines are collected in a 1-cubic-yard hopper in the Glass Bead Satellite Accumulation Area (SAA) (SWMU 7) before being taken to the composite sludge dumpster in SWMU 5. Grinding wheel dust is collected by several small dust collectors located on machines throughout the facility. Grinding wheel dust is taken directly from the machines to the composite sludge dumpster in SWMU 5. Waste deionizing resins are generated by ion exchangers used to deionize tap water. Approximately 12 cubic yards of nonhazardous composite sludge is generated per quarter and is sent to Browning Ferris Industries (BFI) landfill in Davis Junction, Illinois.

Waste absorbent pigs are placed underneath machines to catch oils that drip from them. Approximately 12 cubic yards of waste absorbent pigs are generated per quarter and are stored in a 12-cubic-yard dumpster in SWMU 5 before being sent to BFI's landfill in Davis Junction, Illinois.

Pfauter Maag generates approximately 1 cubic yard of scrap metal per month. The scrap metal is generated by general maintenance and is placed outside in a 10-cubic-yard Scrap Metal Hopper (SWMU 8) prior to shipment to Joseph Behr for recycling in Rockford, Illinois.

In 1986, contaminated waste oil was generated when waste paint thinner (toluene) (F005) was accidentally added to a 2,000-gallon underground storage tank (UST) (SWMU 9) used to store nonhazardous waste oils. Analysis of the contaminated waste oil indicated it was nonhazardous.

However, because F005 waste was added to the waste oil, the entire contents of the tank was considered a RCRA regulated waste and the facility was forced to add the UST to the Part A permit in order to undergo proper RCRA closure. The facility listed the contaminated waste oil as D001 waste, not F005 waste, on the revised Part A permit (Barber Coleman 1986). The UST was RCRA closed and removed in 1987.

In 1989, Pfauter Maag replaced PCB-containing electrical transformers. The transformers were shipped to S.D. Meyers, Inc. in Tallmadge, Ohio, where they were smelted and the PCBs incinerated (IEPA 1990). The transformers were not managed on-site prior to off-site shipment.

2.4 HISTORY OF DOCUMENTED RELEASES

There is no history of documented releases to groundwater, surface water, air, and on-site soils from the facility.

2.5 REGULATORY HISTORY

Barber Coleman submitted a notification of hazardous waste activity form to EPA on August 13, 1980 (Barber Coleman 1980a). The facility listed itself as a generator and included only P030 (cyanides not otherwise specified) wastes in the notification. On November 18, 1980, Barber Coleman submitted a RCRA Part A permit application (Barber Coleman 1980b). This Part A listed container storage (S01) (SWMU 3) capacity of 1,500 gallons of P030 waste. EPA sent Barber Coleman an acknowledgment of notification of hazardous waste activity verification form on September 28, 1981 (EPA 1981). Barber Coleman revised the Part A permit application on May 1, 1986, adding a container storage area (S01), the Hazardous Waste Storage Area (SWMU 1), and a 2,000-gallon Underground Storage Tank (S02) (SWMU 9) (Barber Coleman 1986). The wastes listed on this revision included P030, D005, D001, F002, and D001 with annual generation rates of 2,500 pounds, 1,200 gallons, 2,750 gallons, 440 gallons, and 2,000 gallons, respectively.

On May 5, 1986, Barber Coleman submitted a closure plan to IEPA. The plan addressed closing the two container storage areas (SWMUs 1 and 3) and the 2,000-gallon UST (SWMU 9). The UST was not included in the original Part A permit application because it was used to hold nonhazardous waste

oil. In 1986, paint thinner (toluene) (F005) was inadvertently added to the UST. Analysis indicated the contaminated waste oil to be nonhazardous. However, because F005 waste was added to the waste oil, the entire contents of the tank was considered a RCRA regulated waste and the facility was forced to add the UST to the Part A permit in order to undergo proper RCRA closure. The facility listed the contaminated waste oil as D001 waste, not F005 waste, on the revised Part A permit. On March 11, 1987, Barber Coleman submitted a pre-closure revision of the notification of hazardous waste activity form to correctly list itself as a generator, treatment, storage or disposal facility managing D003 (instead of P030), D005, D001, and F002 wastes. On October 21, 1986, IEPA approved Barber Coleman's closure plan for the container storage areas and the UST (IEPA 1986a).

Closure activities included sampling to confirm clean closure and on June 5, 1987, an IEPA inspection revealed that closure was completed in accordance with the approved closure plan. On August 3, 1987, EPA withdrew Barber Coleman's Part A permit application dated May 1, 1986, changing its status to generator only (IEPA 1987a).

In 1988, Pfauter Maag Cutting Tools bought the entire property and facility from Barber Coleman. On January 8, 1990, Pfauter Maag submitted a revised notification of hazardous waste activity listing itself as a generator managing D001, D003, D005, and F001 wastes (Pfauter Maag 1990a). On February 21, 1991, Pfauter Maag again revised the notification of hazardous waste activity adding F011 waste to the wastes listed in the 1990 revision (Pfauter Maag 1991).

The facility has been inspected by IEPA officials on six occasions. On March 5, 1981, an interim status standards RCRA inspection indicated that the facility was in compliance (IEPA 1981). Inspections on November 20, 1985, and January 23, 1987, revealed apparent violations concerning numerous paperwork deficiencies. Follow-up inspections conducted on October 30, 1986, and March 31, 1987, indicated that these apparent violations were resolved satisfactorily (IEPA 1985, 1986b, 1987b, 1987c).

On January 10, 1990, a RCRA land disposal restrictions inspection revealed an apparent violation indicating that Pfauter Maag had not notified Safety-Kleen, Inc. of the correct EPA hazardous waste code for waste freon. This apparent violation was resolved January 16, 1990, after Pfauter Maag sent

Safety-Kleen acknowledgement that the waste freon (F001) was restricted from land disposal (Pfauter Maag 1990b; IEPA 1990).

Pfauter Maag has one air permit (201808ACK) for its emission sources and associated air pollution control equipment. The permit states that the operation of emission sources cannot begin until all associated pollution control equipment is constructed and operational. The permit was issued based on emissions of particulate matter from the dust collector not exceeding 0.1 pounds per hour (lbs/hr) and 0.44 tons per year (tons/yr) (Pfauter Maag 1989a).

Pfauter Maag has a National Pollutant Discharge Elimination System (NPDES) permit (IL0060151) authorizing Pfauter Maag to discharge noncontact cooling water to an unnamed stream tributary to the Rock River. Pfauter Maag is required to monitor the flow, pH, and temperature of the effluent (Pfauter Maag 1989b).

PRC did not observe documents in the facility, state or federal files indicating that Pfauter Maag has violated its air or NPDES permit.

2.6 ENVIRONMENTAL SETTING

This section describes the climate; flood plain and surface water; geology and soils; and groundwater in the vicinity of the facility.

2.6.1 Climate

Winnebago County has a continental climate with warm summers and cold winters. The lowest average daily temperature is 21 °F in January. The highest average daily temperature is 86°F in July. The average annual precipitation for the county is 35 inches (USDA 1980). The mean annual lake evaporation for the area is about 30 inches (USDC 1968). The maximum 24-hour rainfall is 5.56 inches (USDC 1974).

The prevailing wind is from the west-northwest with a highest monthly average wind speed of 11.7 miles per hour in March from the west-northwest (USDC 1974).

2.6.2 Flood Plain and Surface Water

The facility is located in a 100-year flood plain (FEMA 1983). The nearest surface water body is an inactive gravel pit located 0.2 mile east of the facility. Surface runoff from the facility does not enter the gravel pit.

Surface water drainage at the facility is towards the south-southwest through an on-site drainage ditch which discharges to the an unnamed stream tributary to the Rock River. Pfauter Maag has an NPDES permit to discharge noncontact cooling water to this drainage ditch (Pfauter Maag 1989b).

Other major surface water bodies include Windsor Lake located 0.4 mile northeast of the facility. Windsor Lake is privately owned and is used for recreational purposes. The Rock River, which flows south, is located 1.1 miles west of the facility. The Rock River is used for industrial and recreational purposes.

2.6.3 Geology and Soils

Soil near this facility consists of the Flager, Warsaw, and Hononegah series. These soils are deep, well drained to excessively drained, nearly level to sloping soils that formed in loamy and sandy sediment underlain by sandy and gravelly sediment on high stream terraces (USDA 1980).

Beneath the surface soils are approximately 200 to 300 feet of glacial outwash sand and gravel deposits of Pleistocene Age. Thin layers of lacustrine sands, silt, and clay ranging from 10 to 50 feet thick are located approximately 75 feet below ground surface (bgs), 150 feet bgs, 175 feet bgs, and 200 feet bgs (ISGS 1984).

An Ordovician formation consisting of approximately 250 feet of St. Peter Sandstone directly underlies the glacial sand and gravel outwash. Underlying the St. Peter Sandstone are Cambrian formations consisting of (from top to bottom) 50 feet of Franconia shale, 200 feet of Ironton-Galesville sandstone, 400 feet of Eau Claire shale and sandstone, and approximately 1,300 feet of Mt. Simon Sandstones. Beneath the Mt. Simon Sandstone are preCambrian crystalline rock formations (ISGS 1960).

2.6.4 Groundwater

The principal source of groundwater in the vicinity of the facility is the glacial sand and gravel aquifer of Pleistocene Age developed between 70 and 250 feet bgs. Groundwater flows in a south-southwest direction towards the Rock River. The sandstone aquifers of Ordovician Age and the Cambrian Age aquifers are not extensively developed due to the abundance of water in the sand and gravel aquifer (ISGS 1960).

Lacustrine sands, silts, and clay form thin confining layers in the sand and gravel deposits. Artesian conditions prevail where permeable deposits lie beneath the top of the zone of saturation and are overlain by relatively impermeable deposits; however, because the character of the glacially derived sediments are extremely varied, the deposits that function as confining layers have a wide range of permeability leading to leaky artesian conditions (ISGS 1960).

2.7 RECEPTORS

Pfauter Maag occupies 30 acres in an industrial, commercial, and residential area in Loves Park, Illinois. Loves Park has a population of 16,500 people.

The facility is bordered on the north by Rockford Powertrain Company; on the east by several light industrial facilities; on the south by Barber Coleman Company; and on the west by single family residences. The nearest school, Windsor School, is located 0.25 mile west of the facility. Facility access is controlled by an electronic security surveillance system, locked doors, and a chain link fence.

The nearest surface water body, an inactive gravel pit, is located 0.2 mile east of the facility and has controlled access. Other surface water bodies in the area include Windsor Lake located 0.4 mile northeast of the facility and the Rock River located 1.1 miles west of the facility. Windsor Lake is privately owned and is used for recreational purposes. The Rock River flows south and is used for recreational and industrial purposes.

Groundwater in the area is used as a drinking, industrial, agricultural, and municipal water supply. Residents of Loves Park are served by four municipal wells. The nearest municipal well is located 0.9 mile southwest of the facility. Other municipal wells are located 1.7 miles south-southwest, 3.4 miles west, and 5.4 miles northwest (PRC 1993b). All water used by the facility is supplied by the City of Loves Park groundwater wells.

Sensitive environments are not located on site. The nearest sensitive environment is a palustrine, emergent, seasonally-flooded area, located 0.5 mile south of the facility.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of documented releases, and PRC's observations. Figure 2 shows the SWMU locations.

SWMU 1 **Hazardous Waste Storage Area**

Unit Description: The Hazardous Waste Storage Area (SWMU 1) is located indoors. Waste Stoddard solvent, freon, isopropanol, and barium chloride solids are stored in 55-gallon steel drums in this area. The unit is a 18- by 20-foot epoxy-sealed concrete pad surrounded by a 10-inch epoxy-sealed concrete dike. There are no drains within the diked area. This area was formerly used by Barber Coleman to store D003 and D005 waste. The SWMU was RCRA closed in 1987 and is currently used for less than 90-day storage.

Date of Startup: Documents reviewed by PRC indicate that this unit was used for greater than 90-day storage between 1978 and 1986 and for less than 90-day storage from 1987 to present.

Date of Closure: IEPA approved RCRA closure in 1987. It is currently active.

Wastes Managed: This unit manages waste Stoddard solvent (D001), waste isopropanol (D001), waste freon (F001), and waste barium chloride (D005). This unit formerly also managed waste barium cyanide (D003, F011).

Release Controls: This unit is located indoors in the south end of the building on an epoxy-sealed concrete pad with a 10-inch epoxy-sealed concrete dike to contain any spills. There are no floor drains located in the unit.

History of
Documented Releases: No releases from this unit have been documented.

Observations: During the VSI, the unit contained two sealed 55-gallon steel drums of waste Stoddard solvent (D001) and one 55-gallon steel drum of waste barium chloride (D005). There was no evidence of cracking, pitting, or staining on the concrete (see Photograph No. 1).

SWMU 2 **Hazardous Waste Satellite Accumulation Areas**

Unit Description: There are two hazardous waste satellite accumulation areas located in the south end of the building. One area is used to accumulate waste isopropanol and waste freon in separate 55-gallon steel drums. The second area is used to accumulate waste barium chloride in a 55-gallon steel drum. Full drums are transferred to SWMU 1. Both SAAs are located on epoxy-sealed concrete floors.

Date of Startup: The waste isopropanol and waste freon SAAs have been used since 1982. The waste barium chloride SAA has been used since 1978.

Date of Closure: The unit is currently active.

Wastes Managed: This unit accumulates waste isopropanol (D001), waste freon (F001), and waste barium chloride (D005). Wastes from this unit are ultimately managed in the Hazardous Waste Storage Area (SWMU 1).

Release Controls: This unit is located on epoxy-sealed concrete floors. Floor drains in the area are sealed. Facility representatives did not know the date the floor drains were sealed.

History of
Documented Releases: No releases from this unit have been documented.

Observations:	During the VSI, drums used to accumulate the waste were sealed and there were no visible leaks, cracks, or evidence of spills. There was no cracking, pitting, or staining of the concrete (see Photographs No. 2 and 3).
SWMU 3	**Former Hazardous Waste Storage Area**
Unit Description:	This area is located in the south end of the building and is currently used to store dipping baskets used in the heat treatment process. The area was formerly used to store barium chloride and barium cyanide solids in 55-gallon steel drums.
Date of Startup:	This unit began operation in 1978.
Date of Closure:	IEPA approved RCRA closure in 1987. Pfauter Maag used this area for less than 90-day storage of barium chloride (D005) and barium cyanide (D003) from 1987 to 1990. The unit is currently inactive.
Wastes Managed:	Barber Coleman stored waste barium chloride (D005) and waste barium cyanide (D003) in 55-gallon steel drums in this unit from 1978 to 1986. Pfauter Maag used this unit to store the same waste between 1987 and 1990. This unit has not been used since 1990, when Pfauter Maag discontinued heat treatment processes that generated barium cyanide waste.
Release Controls:	The unit is located on water-base sealed concrete. Floor drains in the area are sealed. Facility representatives did not know the date the floor drains were sealed.
History of Documented Releases:	No releases from this unit have been documented.

Observations:	The former unit was located in an area currently occupied by racks holding heat treatment baskets. PRC did not observe any cracking, pitting, or staining on the concrete floor where the former unit was located (see Photograph No. 4).
SWMU 4	**Nonhazardous Waste Container Storage Area**
Unit Description:	The Nonhazardous Waste Container Storage Area (SWMU 4) is located in the southern half of the part of the facility that is leased by American Pfauter. Nonhazardous waste oils from both Pfauter Maag and American Pfauter are located in the 40- by 20-foot epoxy-sealed concrete pad, which is surrounded by a 10-inch high epoxy-sealed concrete dike.
Date of Startup:	PRC estimates that the unit began operation in 1969. This estimate is based on the date the facility began operation.
Date of Closure:	This unit is active.
Wastes Managed:	This unit stores nonhazardous waste oils from both Pfauter Maag and American Pfauter. The unit is located in the eastern half of the facility, which is leased to American Pfauter by Pfauter Maag. American Pfauter has an EPA identification number separate from Pfauter Maag; however, the waste oils are managed in this unit together and are taken by the same recycler.
Release Controls:	The unit has an epoxy-sealed concrete floor with no drains. A 10-inch epoxy-sealed concrete dike surrounds the unit to contain any spills.
History of Documented Releases:	No releases from this unit have been documented.

Observations:	The unit contained approximately 50 55-gallon steel drums during the VSI. The floor and concrete dike were in good condition with no visible cracks, pits, or stains (see Photograph No. 5).
SWMU 5	**Nonhazardous Waste Dumpsters**
Unit Description:	The nonhazardous waste dumpsters are located outside beneath a building overhang. The unit consists of two 12-cubic-yard polyethylene-lined dumpsters. One dumpster is used to store composite sludge and the other waste absorbent pigs.
Date of Startup:	PRC estimates that the unit began operation in 1969. This estimate is based on the date the facility began operation.
Date of Closure:	This unit is active.
Wastes Managed:	This unit stores nonhazardous composite sludge and nonhazardous waste absorbent pigs. Composite sludge is a combination of grinding swarf, steel shot fines, glass bead fines, grinding wheel dust, and deionizing resins. Absorbent pigs are used to collect nonhazardous oils that drip from machines. Approximately 12 cubic yards of composite sludge and 12 cubic yards of waste absorbent pigs are generated per quarter.
Release Controls:	This unit is located beneath a building overhang. The steel dumpsters are lined with polyethylene. There are no drains or sewers near this unit.
History of Documented Releases:	No releases from this unit have been documented.

Observations:	Each dumpster was approximately half full during the VSI. There was no cracking or pitting of the concrete upon which the dumpsters were located (see Photograph No. 6).
SWMU 6	**Baghouse Dust Collector**
Unit Description:	The Baghouse Dust Collector (SWMU 6) is located outdoors on a concrete pad, on the south side of the building. Steel shot fines are generated by a shot blaster used to descale the cutting tools after heat treatment. The steel shot fines and dust are collected and contained in a 55-gallon steel drum in this unit.
Date of Startup:	Facility representatives estimated that the unit began operation in 1978.
Date of Closure:	This unit is active.
Wastes Managed:	Nonhazardous steel shot fines are collected in this unit. The waste from this unit is ultimately managed in the combined sludge dumpster in SWMU 5.
Release Controls:	The waste is contained in a sealed 55-gallon steel drum. The unit is located on a concrete pad. There are no drains or sewers near this unit.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	During the VSI, the unit was collecting dust in a sealed 55-gallon steel drum. There was no evidence of odors or particulate escaping from the unit. There was no cracking, pitting, staining, or dust on the concrete beneath the unit (see Photograph No. 7).

SWMU 7 **Glass Bead Satellite Accumulation Area**

Unit Description: The Glass Bead Satellite Accumulation Area (SWMU 7) is located indoors in the south end of the facility. The unit consists of one 1-cubic-yard hopper used to accumulate glass bead fines. The hopper is located on a 6-inch concrete floor that is covered with 2-inch wooden blocks and epoxy-sealed.

Date of Startup: Facility representatives estimated that this unit has been in operation since 1978.

Date of Closure: This unit is active.

Wastes Managed: This unit accumulates glass bead fines in one 1-cubic-yard hopper. Wastes from this unit are ultimately managed in the Nonhazardous Waste Dumpster (SWMU 5) as part of the composite sludge.

Release Controls: The unit is located on a 6-inch concrete floor that is overlain by 2-inch epoxy-sealed wooden blocks. There are no floor drains in the area around the unit.

History of Documented Releases: No releases from this unit have been documented.

Observations: The unit contained approximately 1 cubic yard of glass bead fines during the VSI. A small amount of glass bead fines was on the floor beneath the hopper (see Photograph No. 8).

SWMU 8 **Scrap Metal Hopper**

Unit Description: The Scrap Metal Hopper (SWMU 8) is located outdoors on the south side of the building. The unit stores scrap metal which is eventually

	sent to a recycler. The hopper is approximately 10 cubic yards in size and is located on concrete in the loading dock area.
Date of Startup:	PRC estimates that the unit began operation in 1969. This estimate is based on the date the facility began operations.
Date of Closure:	The unit is active.
Wastes Managed:	Nonhazardous recyclable scrap metals are collected in this unit.
Release Controls:	This unit is located on concrete.
History of Documented Releases:	No releases from this unit have been documented.
Observations:	The unit contained 3 cubic yards of scrap metal during the VSI. All materials inside the dumpster appeared to be scrap metal (see Photograph No. 9).
SWMU 9	**Former Underground Storage Tank**
Unit Description:	The Former Underground Storage Tank (SWMU 9) was located outdoors in the southeast corner of the facility. The tank was originally used to store used machine oils. The unit was listed on a revised Part A application permit submitted May 1, 1986, after a small volume of waste paint thinner (toluene) was accidentally added to the tank.
Date of Startup:	Facility representatives were unsure of the tank's installation date. PRC estimates that the unit began operation in 1969. This estimate is based on date the facility began operations. The unit was added to the

	facility's Part A permit application in 1986, after waste paint thinner (toluene) was accidentally added to the tank.
Date of Closure:	IEPA approved RCRA closure in 1987, and the unit was removed.
Wastes Managed:	This unit was used to store nonhazardous used oils. In 1986, a small amount of waste paint thinner (toluene) was accidentally added to the tank. Waste analysis revealed that the contents were still considered nonhazardous; however, because F005 waste was added to the waste oil, the entire contents of the tank was considered a RCRA regulated waste, and the facility was forced to add the UST to the Part A permit in order to undergo proper RCRA closure.
Release Controls:	The unit has been removed.
History of Documented Releases:	No release from this unit has been documented.
Observations:	The unit has been removed. The area where the unit was located is now covered with grass.

4.0 AREAS OF CONCERN

PRC did not identify any AOCs during the PA/VSI.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified nine SWMUs and no AOCs at the Pfauter Maag facility. Background information on the facility's location; operations; waste generating processes and waste management practices; history of documented releases; regulatory history; environmental setting; and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, history of documented releases, and observed condition, is presented in Section 3.0. AOCs are discussed in Section 4.0. Following are PRC's conclusions and recommendations for each SWMU. Table 3, at the end of this section, summarizes the SWMUs at the facility and the recommended further actions.

SWMU 1 **Hazardous Waste Storage Area**

Conclusions: The Hazardous Waste Storage Area is located in the southern end of the facility. IEPA approved RCRA closure of this unit in 1987. Closure procedures included sampling. The unit is currently active for less than 90-day storage of hazardous waste. Waste Stoddard solvent, waste isopropanol, waste freon, and waste barium chloride are stored in separate sealed 55-gallon steel drums in this unit for less than 90 days. The unit formerly also managed waste barium cyanide. The unit typically contains no more than 20 drums per quarter. The unit consists of an epoxy-sealed concrete pad surrounded by a 10-inch epoxy-sealed concrete dike. There are no floor drains within the unit. No releases from this unit have been documented. The potential for a release from this unit to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this unit.

SWMU 2 **Hazardous Waste Satellite Accumulation Areas**

Conclusions: There are two hazardous waste SAAs located in the southern end of the building. One area is used to accumulate waste isopropanol and waste freon in separate 55-gallon steel drums. The second SAA is used to accumulate

waste barium chloride salts in a 55-gallon steel drum. The floors underlying these areas are epoxy-sealed concrete. No releases from this unit have been documented. The potential for a release from this unit to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this unit at this time.

SWMU 3 **Former Hazardous Waste Storage Area**

Conclusions: The Former Hazardous Waste Storage Area was located in the southern end of the building and was used to store waste barium chloride and waste barium cyanide heat-treatment salts. This unit was RCRA closed in 1987. Closure procedures included sampling. Pfauter Maag purchased the facility in 1987 and used this unit for less than 90-day storage of waste barium chloride and waste barium cyanide between 1987 and 1990. Pfauter discontinued storing hazardous waste in this unit in 1990 when the facility eliminated cyanide salt heat treating. The unit was located on a water-based sealed concrete floor. No releases from this unit have been documented. The potential for a release from this unit to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this unit at this time.

SWMU 4 **Nonhazardous Waste Container Storage Area**

Conclusions: Nonhazardous waste oils generated by both Pfauter Maag and American Pfauter are managed in this unit. The unit is located in the southern half of the portion of the facility that is leased to American Pfauter by Pfauter Maag. The unit is a 40- by 20-foot epoxy-sealed concrete pad surrounded by a 10-inch high epoxy-sealed concrete dike. There are no floor drains within the unit. No releases from the unit have been documented. The potential for a release to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this unit at this time.

SWMU 5 **Nonhazardous Waste Dumpsters**

Conclusions: This unit consists of two 12-cubic-yard polyethylene-lined dumpsters located on concrete beneath a building overhang on the south side of the building. No releases from this unit have been documented. The potential for a release from this unit to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 6 **Baghouse Dust Collector**

Conclusions: This unit collects nonhazardous steel shot fines in a sealed 55-gallon steel drum. The unit is located outdoors on a concrete pad. No releases from this unit have been documented. The potential for a release from this unit to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this SWMU at this time.

SWMU 7 **Glass Bead Satellite Accumulation Area**

Conclusions: This unit consists of one 1-cubic-yard hopper used to accumulate nonhazardous glass bead fines. No releases from this unit have been documented. The potential for a release from this unit to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action on this SWMU at this time.

SWMU 8 **Scrap Metal Hopper**

Conclusions: This unit consists of one 10-cubic-yard hopper used to store nonhazardous scrap metal. No releases from this unit have been documented. The potential for a release to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action on this SWMU at this time.

SWMU 9 **Former Underground Storage Tank**

Conclusions: The Former UST was a 2,000-gallon tank used for the storage of nonhazardous waste oils. In 1986, waste paint thinner (toluene) was accidentally added to the tank. Analysis of the contaminated waste oil revealed the contents to be nonhazardous. In 1986, this unit was added to the Part A permit and in 1987 underwent IEPA-approved RCRA closure. Sampling was conducted as part of closure. No releases from this unit have been documented. The unit no longer exists; therefore, the potential for release to groundwater, surface water, air, and on-site soils is low.

Recommendations: PRC recommends no further action for this SWMU at this time.

TABLE 3

SWMU SUMMARY

SWMU	Dates of Operation	Evidence of Release	Recommended Further Action
1. Hazardous Waste Storage Area	1978 to 1986; 1987 to present	None	No further action
2. Hazardous Waste Satellite Accumulation Area	1978 to present	None	No further action
3. Former Hazardous Waste Container Storage Area	1978 to 1986; 1987 to 1990	None	No further action
4. Nonhazardous Waste Storage Area	1969 to present	None	No further action
5. Nonhazardous Waste Dumpsters	1969 to present	None	No further action
6. Baghouse Dust Collector	1978 to present	None	No further action
7. Glass Bead Satellite Accumulation Area	1978 to present	None	No further action
8. Scrap Metal Hopper	1969 to present	None	No further action
9. Former Underground Storage Tank	1969 to 1986	None	No further action

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APPENDIX A

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

(7 pages)

VISUAL SITE INSPECTION SUMMARY

Pfauter Maag Cutting Tools (Pfauter Maag)
1351 Windsor Road
Loves Park, Illinois 61111
ILD 070 168 968

Date:	March 26, 1993
Primary Facility Representative:	Chris Berndt, Plant Engineer, Pfauter Maag
Representative Telephone No.:	815-877-8900
Additional Facility Representatives:	James E. Hursh, Vice President-Manufacturing, Pfauter Maag Gene Fox, Fehr-Graham & Associates
Inspection Team:	Michael Duffin, PRC Environmental Management, Inc. (PRC) Scott Storlid, PRC
Photographer:	Scott Storlid
Weather Conditions:	Overcast, calm, temperature about 40° F
Summary of Activities:	The visual site inspection (VSI) began at 9:00 a.m. with an introductory meeting. The inspection team explained the purpose of the VSI and the agenda for the visit. Facility representatives then discussed the facility's past and current operations, solid wastes generated, and release history. Facility representatives provided the inspection team with copies of requested documents. The VSI tour began at 10:15 a.m. PRC inspected all areas of the facility. PRC first inspected the cutting, grinding, and machinery area of the facility. PRC observed the grinding swarf magnetic separator, absorbent pigs, the cutting oils and coolants used in the machines, and the parts washers. PRC observed no stains or evidence of release. PRC inspected the heat-treatment area and observed the hazardous waste satellite accumulation areas (SWMU 2), the former hazardous waste container storage area (SWMU 3), the glass bead fines satellite accumulation area (SWMU 7), and the current hazardous waste storage area (SWMU 1). PRC observed no evidence of release from these areas. The tour continued outdoors where PRC inspected the nonhazardous waste dumpsters (SWMU 5), the scrap metal hopper (SWMU 8), and the steel shot fines baghouse dust

collector (SWMU 6). PRC observed no evidence of release from these areas.

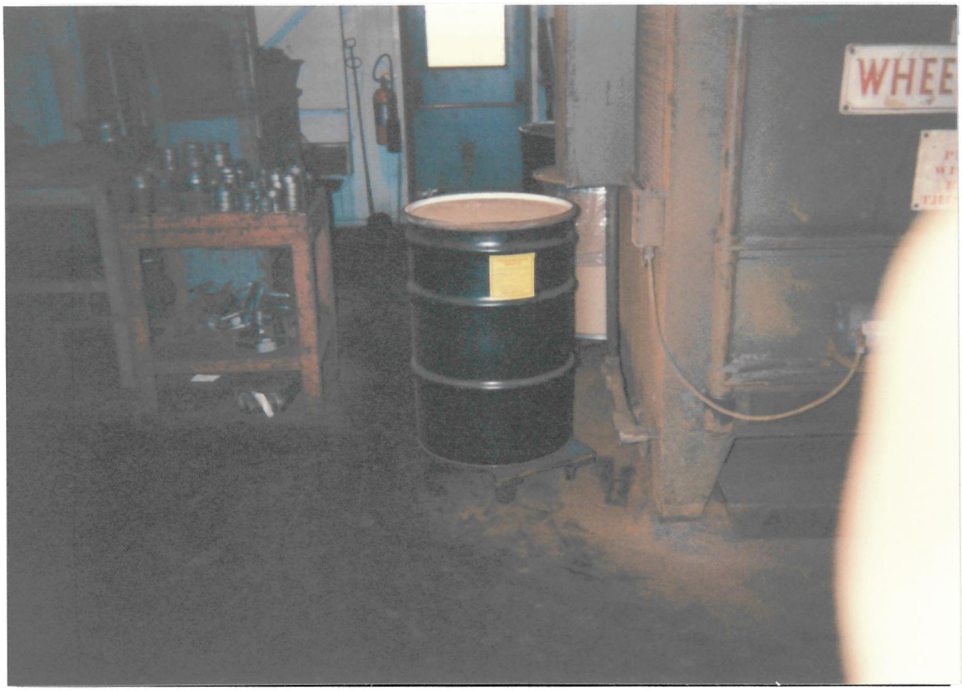
The tour then moved into the portion of the facility leased to American Pfauter by Pfauter Maag. PRC observed the nonhazardous waste storage area (SWMU 4) which is used by both facilities. PRC observed no evidence of release from this area.

PRC then inspected the area which contained the former underground storage tank (SWMU 9) that was used to store nonhazardous waste oils. PRC observed no evidence of release from this area.

The tour concluded at 11:07 a.m., after which the inspection team held an exit meeting with the Pfauter Maag representatives. The VSI was completed and the inspection team left the facility at 11:40 a.m.

Photograph No. 1 Location: SWMU 1
Orientation: South Date: 3-26-93
Description: This photograph shows the Hazardous Waste Storage Area. The blackboard in the background is used to track inventory.

Photograph No. 2 Location: SWMU 2
Orientation: East Date: 3-26-93
Description: This photograph shows the Hazardous Waste Satellite Accumulation Area used to accumulate waste isopropanol and waste freon. Full drums are transferred to SWMU 1.



Photograph No. 3 Location: SWMU 2
Orientation: South Date: 3-26-93
Description: This photograph shows the Hazardous Waste Satellite Accumulation Area used to accumulate waste barium chloride. This unit was formerly used to accumulate waste cyanide salts. Full drums are transferred to SWMU 1.

Photograph No. 4 Location: SWMU 3
Orientation: South Date: 3-26-93
Description: This photograph shows the Former Hazardous Waste Storage Area. The area was formerly used to manage waste barium chloride and waste cyanide salts.

Photograph No. 5 Location: SWMU 4
Orientation: West Date: 3-26-93
Description: This photograph shows the Nonhazardous Waste Container Storage Area. This unit is located in the portion of the facility that is leased to American Pfauter by Pfauter Maag. American Pfauter also stores nonhazardous waste in this unit.

Photograph No. 6 Location: SWMU 5
Orientation: North Date: 3-26-93
Description: This photograph shows the Nonhazardous Waste Dumpsters used to store sludge and absorbent pigs.

Photograph No. 7 Location: SWMU 6
Orientation: North Date: 3-26-93
Description: This photograph shows the Baghouse Dust Collector used to collect nonhazardous steel shot fines.

Photograph No. 8 Location: SWMU 7
Orientation: South Date: 3-26-93
Description: This photograph shows the 1-cubic-yard hopper Glass Bead Satellite Accumulation Area.

Photograph No. 9 Location: SWMU 8
Orientation: South Date: 3-26-93
Description: This photograph shows the 10-cubic-yard hopper used to store scrap metal.

Photograph No. 10 Location: SWMU 9
Orientation: North Date: 3-26-93
Description: This photograph shows the area where the Former UST was located. Facility representatives stated that the tank was located near the corner of the two buildings (background of the photograph).

APPENDIX B

VISUAL SITE INSPECTION FIELD NOTES

(8 pages)

MARCH 26, 1993
AMERICAN PFAUTER,
PFAUTER-MAAG (PM)
LOVES PARK, IL.

0845 ARRIVE ON SITE
- OVERCAST, CALM, 40°F

1351 WINDSOR RD.

SCOTT STORLIE, PRC
MIKE DUFFIN, PRC

CHRIS BERNAT, PM, PLANT MANAGER
GENE D. FOX, PROJECT MANAGER
JAMES E. HURSH

0900 BEGIN MEETING

- 1969, CONSTRUCTED
BARBER-COLEMAN CO.
MACHINE TOOL DIVISIO
1980-SOLD MACHINE TOOL
DIVISION
1986 - LEASED SPECIALTY
TOOL DIVISION TO
ROCKFORD AUTOMATIO
CMANUFACTURE OF
AUTOMATED ASSEMBLY
EQUIP.)
HAD THERE OWN I.D
NUMBER. LOOK UP!
1987-SEPT - B-C SOLD
SPECIALTY TOOL DIVISIO
TO PFAUTER-MAAG.
1988-JUNE- PFAUTER-MAA
BOUGHT PROPERTY
1990 - DEC - RA WENT

NO LONGER EXIST

1991 - MARCH - AMERICAN PFAUTER MOVED IN TO THE EMPTY AREA -

ROCKFORD AUTOMATION

ILD 981 954 928

AMERICAN PFAUTER

ILD 984 817 858

ENTIRE BUILDING W/OFFICE

250,000 FT^2

PM

125,000 FT^2. WEST 1/2

RA

125,000 FT^2 } EAST 1/2

AP 125,000 FT^2 }

PROPERTY ASSESSMENT

COMPLETED IN 1988 -

CHIEF COUNSEL HAS COPY.

CATHY LETOURNEAU

CURRENT WASTE STREAMS

GRINDING SWARTH } COMPOSITED

GLASS BEAD } IN 1 SUMV

GRINDING WHEELS }

DUST COLLECTOR }

12 yd^3 DUMPSTER,

BFI, DAVIS JUNCTION, IL.

6 yd^3 / QUARTER

WASTE RAGS - OIL

ABSORBANT,

12 yd^3 DUMPSTER

BFI, DAVIS JUNCTION

12 yd^3 / QUARTER

SPENT DEIONIZING RESIN - INTERMITENT, 110 GAL./YR. MANAGED W/ SWARTH OR PIGS.

USED OIL
IPC - ROCKFORD, RECYCLED
AQEUOUS TREATERS, BOTH WATER SOL + PETROLEUM BASED.
4,000 GAL/YEAR
CUTTING OIL, MACHINING OILS, COOLANTS
DRUMMED - PUMPED FROM MACHINE SUMPS AND TAKEN TO A CONTAINER STORAGE AREA

STODDARD SOLVENT (D001)
CLEANING TANKS (8-10) & ARE MANAGED BY SAFETY-KLEEN, MANAGE 22 OF THEIR OWN - TAKEN FROM CLEANERS WHEN SPENT TO A CONTAINER STORAGE AREA
12-14 DRUMS/QUARTER
SAFETY-KLEEN - ELGIN OR DOLTON

BARIUM CHLORIDE (D005)
SPENT SALT FROM HEAT TREAT
4-6 DRUMS/QTR.
CYANOCHEM, DETROIT

RENDERED NONHAZ →
LANDFILLED
CLEAN THE BOTANICS
1/DAY + SKIMMED
55-GALLON SAA THEN
TO CONTAINER STORAGE
AREA

ISOPROPYL (D001)
CLEANING AGENT
55-GALLON SAA
THEN TO CONTAINER STORAGE
1-2 DRUMS/QTR.
TREATMENT ONE, HUSTON
TX. FUEL BLEND

FREON - F001
SPORATIC GENERATION,
1 DRUM/YEAR
55-GALLON DRUM SAA

THEN CONTAINER STORAGE.
DOLTON, RECYCLE
PROCESSES
MAKE CUTTING TOOLS
FORMING - GRINDING,
MACHINING, CUTTING
HEAT TREAT - AT VARIOUS
TIMES
ETCHING
COATING - TITANIUM
NITRATE

FOIL { D003, P030
- DISCONTINUED
IN 1992 - ONLY
1 DRUM/YEAR - MANAGED
THE SAME AS D005

190 EMPLOYEES
24 HOURS - SUN-SAT
30 ACRES

1 ALKALINE CLEANER - FLUSH TO SANITARY 1 WK - 30 GAL IN TITANIUM COATING AREA

NPDES - NONCONTACT COOLING WATER - OVERLAND - PERCOLATES TO GROUND + GOES TO A DITCH TO RIVER

AIR PERMITS
1 OPERATING AIR PERMIT - GENERAL 201 808 ACK

STORM WATER AFFIDA FOR

DISCHARGES,
- GENERAL WASTEWATER PERMIT WTP 0000000126
- ROCK RIVER WATER RECLAMATION DISTRICT

NO HISTORY OF DOCUMENTED RELEASE OF H.W.

SURFACE WATER RUNOFF - PROPERTY PERIMETER - TO DITCHES OR STORM SEWER

ELECTRONIC SECURITY SYSTEM - 24 HOUR

CLOSURE OF SWMUS WAS BEFORE PM PURCHASED - FACILITY

122

REPS DID NOT KNOW WHICH WASTES WERE STORED IN WHICH PART A STORAGE AREA.

1015 BEGIN VSI TOUR

FLOOR 6" CONCRETE, 2" WOODBLOCKS, NO FLOOR DRAINS

SWARTH - COLLECTED AT MACHINERY ON MAGNETIC SEPERATER, SCRAPED OFF & TAKEN TO DUMPSTER

1023 PIC 1 - SOUTH - BAGHOUSE DUST SAA - ONLY 1 UNKNOWN DATE ≈1978 OR

1026 PIC 2 - E - ISOPROPYL & FREON SAA SINCE ≈1982

123

1028 PIC 3 - S - FORMER SOI FOR D005 AND D003 1978 - 1986 1986 - 1990 >90 DAY <90 DAY

1032 PIC 4 - S - BARIUM SAA & FORMER F011 SAA 1978 - PRESENT

1035 PIC 5 - N - NONHAZ. WASTE DUMPSTERS

METAL SCRAP - 1 YD^3 HOPPER | mO JOSEPH BEHR, RECYCLING, ROCKFORD

1038 PIC 6-S SCRAP METAL DUMPSTER

1040 PIC 7-N- FORMER USED OIL UST- REMOVED 1986

1041 ENTER AN AREA OF COMBINED USE BY PM + AP.

PM- USED OIL STORAGE - COMBINED W/ AMERICAN PFAUTER HAZ. WASTE STORAGE SEALED CONCRETE, BERMED AM. P- PAINT FILTERS (FOR) USED OIL, GRINDING SLUDGE

1047 PIC 8- WEST PM USED OIL AND AM. P NONHAZ + HAZ.

1050 PIC 9-N- BAGHOUSE

SOUTH - BARBER-COLEMAN
WEST - RESIDENTIAL
EAST - LIGHT INDUSTRIAL
NORTH - ROCKFORD MOUNTAIN

1055 CURRENT < 90 DAY HAZ WASTE FORMER > 90 DAY
1 DRUM BARIUM
2 DRUM D001
1980-1986 SAS > 90 DAY
1986-PRESENT < 90 DAY
PIC 10 SE

DUST COLLECTORS
15-18 IN ALL

1107 END OF VSI TOUR
WRAP-UP INTERVIEW.

- LAST INSPECTION BY IEPA.
1990 - NO VIOLATIONS
NOTED

11[illegible]. END OF VSI
LEAVE FACILITY

S.A. [signature]

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S.G.S.